1. Non-technical summary

Introduction

Environmental assessment is a process designed to take environmental impacts into account in the development of a project or program plan, right from the early stages of consideration. It serves to enlighten both the project owner and the administration on the definition of the project or plan, with regard to environmental issues and those relating to human health in the area concerned, as well as to inform and facilitate public participation. It must report on the potential or proven effects of the project, plan or program on the environment, and analyze and justify the choices made with regard to the issues identified in the area concerned.

Plans and programs are referred to as Strategic Environmental Assessments (SEAs). Maritime Spatial Planning (MSP) documents are systematically subject to this process, in accordance with article R.122-17 of the French Environment Code. The preparation and implementation of this document are carried out under the authority of the coordinating prefects, maritime prefect of the Atlantic and prefect of region Nouvelle Aquitaine. At national level, the DSF is overseen by the ministries responsible for the sea, the environment and energy.

This report describes the environmental assessment process carried out to update the strategic section of the South Atlantic MSP document for the third implementation cycle of the Marine Strategy Framework Directive, and has been produced in accordance with article R.122-20 of the French Environment Code. In particular, it covers issues linked to offshore wind farm planning, as the mapping of priority areas has been integrated into the MSP document by law n°2023-175 of March 10, 2023 relating to the acceleration of renewable energy production.

This report was produced by the departments in charge of drawing up the plan (national services in charge of marine spatial planning, marine ecosystems, offshore wind development, along with local states services), with the support of external service providers: the EPICES and Biotope consortia, and the CREOCEAN consultancy firm for elements specific to offshore wind power.

It should be noted that the updating of the MSP document, like its preparation, is carried out in two stages - the strategic section and then the operational section. This report concerns only the update of the strategic section adopted in 2019. The operational component adopted in 2022 remains unchanged at this stage. **In the remainder of this report, we will therefore MSP document's strategic section**.

This assessment benefits from feedback the French Environmental Authority (AE) on both parts of the first MSP document.

Methodological choices and their limits

The SEA took place from April to December 2024. The SEA was structured around three main methodological choices:

a) Continuity with SEA of the previous MSP document

As the strategic section of the document update is an update rather than a complete overhaul, the methodology is largely in line with that of previous assessments.

b) Particular attention to the development of marine renewable energies, especially offshore wind power.

As the planning of offshore wind power development is the most significant evolution of the strategic section, particularly in terms of environmental impact, it has been the subject of specific assessment work and developments in this report.

c) Taking into account the preliminary framework of Environmental Authority

At the request of the project owner, this SEA was subject of a preliminary review by the Environmental Authority (EA)[1], which helped to answer certain methodological questions.

.

However, the very fact that the environmental assessment in this case concerns a planning document implies the limits inherent to this plans/programs : the uncertainties concerning, on the one hand, the assessment of the good ecological status of many environmental issues, on the other hand, the precise knowledge of the pressures applied on the marine environment by numerous human activities. The various impacts can thus be counted and compared according to various criteria, but in no way sized up in terms of their magnitude in relation to each other. The impact of the planning document will therefore depend on the implementation of planned projects and activities, for which the information available is limited. This last limitation explains in particular the difficulties encountered in fully applying the mitigation hierarchy and in precisely defining compensation measures on the scale of the strategic section of the plan.

Brief presentation of the plan and the context in which it was developed

With its maritime and coastal areas, France boasts a remarkable natural heritage and significant potential for socio-economic development. The sea and coasts are subject to multiple uses, as well as pressures from climate change, land-based pollution and the impact of human activities. In order to guarantee the good environmental status (GES) of the marine environment while enabling the economic and social development of the sea and coast, a first national strategy was adopted in February 2017 for 6 years (2017-2023). This first National Sea and Coastline Strategy was revised in 2023, and the next one (2024-2030) was adopted by decree on June 10, 2024.

The **National Sea and Coastline Strategy** provides a reference framework for public policies concerning the sea and coast. It thus embodies the maritime pillar of ecological planning, and is thus articulated with other national strategies, notably the national port strategy , the national biodiversity strategy , the national low-carbon strategy , the multi-year energy program and the national coastline strategy .

The national strategy 2024-2030 sets out four **key priorities for the period**:

— Carbon neutrality: to help achieve carbon neutrality by 2050, the accelerated deployment of offshore wind power, with a target of 45 GW installed by 2050, is combined with the decarbonization of ports and ship fleets, and the preservation of blue carbon ecosystems;

— Biodiversity: drawing on knowledge and innovation, the strategy promotes the preservation of maritime and coastal ecosystems in mainland France and the French overseas territories, in particular through the deployment of highly protected areas;

— Equity: action must contribute to the short- and long-term well-being of the populations, employees and players in the maritime and coastal areas of France and its overseas territories, in particular by rethinking the model of tourism and economic attractiveness of the coasts;

1 Avis délibéré de l'Autorité environnementale pour le cadrage préalable de l'évaluation environnementale stratégique des stratégies de façades maritimes intégrant le développement de l'éolien en mer - Avis délibéré n° 2024-039 adopté lors de la séance du 13 juin 2024.

— Economy: innovation and training are mobilized to strengthen the competitiveness of our sustainable blue economy and the sovereignty of France in mainland France and the French overseas territories.

The MSP documents are the territorial declination of this national strategy.

France has chosen to use these documents to meet its obligations to transpose two European framework directives:

- **The Marine Strategy Framework Directive** (Directive 2008/56 of June 17, 2008) aims to maintain or achieve good environmental status in the marine environment. Accordingly, member states are required to draw up marine strategies, to be reviewed every six years.

- **The "maritime spatial planning" framework directive** (Directive 2014/89 of July 23, 2014), which establishes a framework for maritime planning and requires member states to ensure coordination of the various activities at sea. Plans have thus been drawn up that identify the spatial and temporal distribution of relevant, existing and future activities and uses in their marine waters.

As such, they include maritime spatial planning elements and the marine strategies. From a formal point of view, the Environment Code (articles R219-1-7 to R219-1-14) stipulates that these documents comprise four parts:

- the existing situation, the challenges and a vision for the future of the South Atlantic area (part 1) ;

- the definition of strategic objectives from an economic, social and environmental point of view, and the associated indicators; these are accompanied by a vocational map that defines coherent zones within maritime areas with regard to the general challenges and objectives assigned to them (part 2);

- procedures assessing the implementation of the MSP document (part 3);

- the action plan (part 4).

Parts 1 and 2 of the MSP document constitute the **strategic section**. The latter was drawn up in 2018 and was the subject of an initial strategic environmental assessment. Following subsequent consultations, this maritime strategy was officially adopted on October 14, 2019. **This SEA concerns the update of this first strategy, initiated in 2023.**

The updating of the strategic section was the subject of a **public debate**, organized between November 2023 and April 2024, mutualized with the offshore wind farm planning. Various events (public meetings, workshops, various initiatives, visits, mobile debates and webinars) were organized by the French National Commission for Public Debate . On the South Atlantic coast, 83 events were organized, involving just over 5,000 people, including 1,600 young people. An online participatory platform was set up, attracting more than 1,000 textual contributions (dor all maritime regions combined).

The minutes and balance sheet of the public debate, published by the Commission on June 26, 2024, summarized the public's contributions and included requests for clarification and recommendations to the project owner (the French government and French TSO). On October 18, 2024, the ministerial decision of October 17, 2024 was published following the public debate on the updating of the strategic sections of MSP documents and the mapping of priority maritime and land areas for offshore wind power [2], as well as the project owners' report on the lessons learned from the public debate[3].

2 Online access to the decision: https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000050362918

Linking the SFM with other plans and programs along the coast

An analysis is proposed to meet the challenges of coordination with other plans and programs along the coast, based on their "functional" nature (the programs pursue objectives that are partly common), or their "structuring" nature (compatibility/consideration required by law), or their scale (national, regional or basin-wide).

Given the **interactions between land and sea**, watersheds and land areas have an influence on maritime and coastal areas, particularly through water quality or obstacles to land/sea connectivity. The proper coordination of MSP documents with land-based planning documents that have an impact on the sea and coastline, in particular water development and management water plans, regional sustainable development and territorial equality plans, territorial coherence plans and local town planning schemes is analysed.

Main elements of the update and justification for the choices made

The report examines the changes envisaged when the strategic section is updated, and explains:

— reasonable alternative solutions to meet the purpose of the plan, scheme, program or planning document within its territorial scope. The advantages and disadvantages of each alternative are indicated;

— a statement of the reasons why the draft plan, scheme, program or planning document has been selected, particularly with regard to environmental protection objectives.

The main changes from the previous cycle are as follows:

(a) **the introduction of offshore wind power planning** that meets France's commitments, with a national target of 45 GW commissioned by 2050, with a view to achieving carbon neutrality by that date. The priority zones identified in South Atlantic aim to install 1.2 GW of new projects by 2035 and 1.2 GW by 2040. These zones are supplemented by zones for 2050 (see below).

(b) strengthening the protection of marine ecosystems through the development of **highly protected areas planned on the scale of each maritime region**. In view of the combined effect of the numerous pressures exerted on a particularly constrained area (maritime traffic, fishing, tourism, offshore wind farms, etc.) and the objective of achieving good ecological status (GES) for marine environments, the target of 3% of the waters of the South Atlantic area covered by highly protected areas by 2027 has been included in the national sea and coastline strategy and in the national biodiversity strategy.

(c) **An updated vision for the maritime region**, with a timeframe of 2050 instead of 2030 for the former planning document. The vision is strengthened in terms of biodiversity (integration of a trajectory for the development of highly protected areas) and marine renewable energies.

(d) **The updating of the assessment of the initial status of** marine waters, to evaluate whether or not good environmental status has been achieved for each ecological issue.

(e) the **updating of environmental targets** in order to make more operational those adopted in the previous cycle that still lacked monitoring indicators or had indicators that had not been evaluated, and to adjust the wording of some of them or indicators to

3 Access to the online report: https://www.eoliennesenmer.fr/sites/eoliennesenmer/files/inline-files/Rapport%20MO_sep2024-A4-10_17.pdf

improve legibility. A few environmental targets have been created to take into account evolutions in public policy (for example, the setting of a target for the development of highly protected areas).

(f) **The updating of the socio-economic targets** to reflect the objectives of the national strategy 2024-2030 and following the work carried out on the scale of the maritime region (changes in context and issues), and also taking into account the action plan of the current MSP document (2022), which provide specific responses to certain issues.

(g) **The updating of the vocation maps**, which identify coherent zones within the facade and provide spatial reference points for the strategies implemented.

The report considers different alternative scenarios to updating the MSP document: no update, no articulation between marine planning and offshore wind planning, or with the development of highly protected areas. The focus is on the reasonable alternative options discussed for offshore wind power.

The reasons for updating the socio-economic and environmental targets are also presented.

An assessment of the previous strategy was first carried out, revealing a limited number of operational socio-economic targets and a lack of evaluation of the 104 indicators associated with the 67 specific socio-economic strategic targets. It was possible to evaluate 30 indicators, i.e. 28.8% of the total number of indicators. On the basis of this assessment, the French government and the stakeholders updated the socio-economic targets and associated indicators, looking for operational indicators for this second exercise.

Offshore wind power development

The rapid reduction of greenhouse gas emissions, in line with France's international and European commitments, is at the heart of mitigating climate change, which is now a major threat to all ecosystems.

The national strategy 2024-2030 identifies carbon neutrality as one of four priorities, and places the development of offshore wind power as a pillar of the decarbonization of energy in France. Objective 13 sets national targets of 18 GW commissioned by 2035 and 45 GW of generating capacity by 2050. In order to achieve this target, the updated maritime façade strategy introduces offshore wind power planning for two horizons:

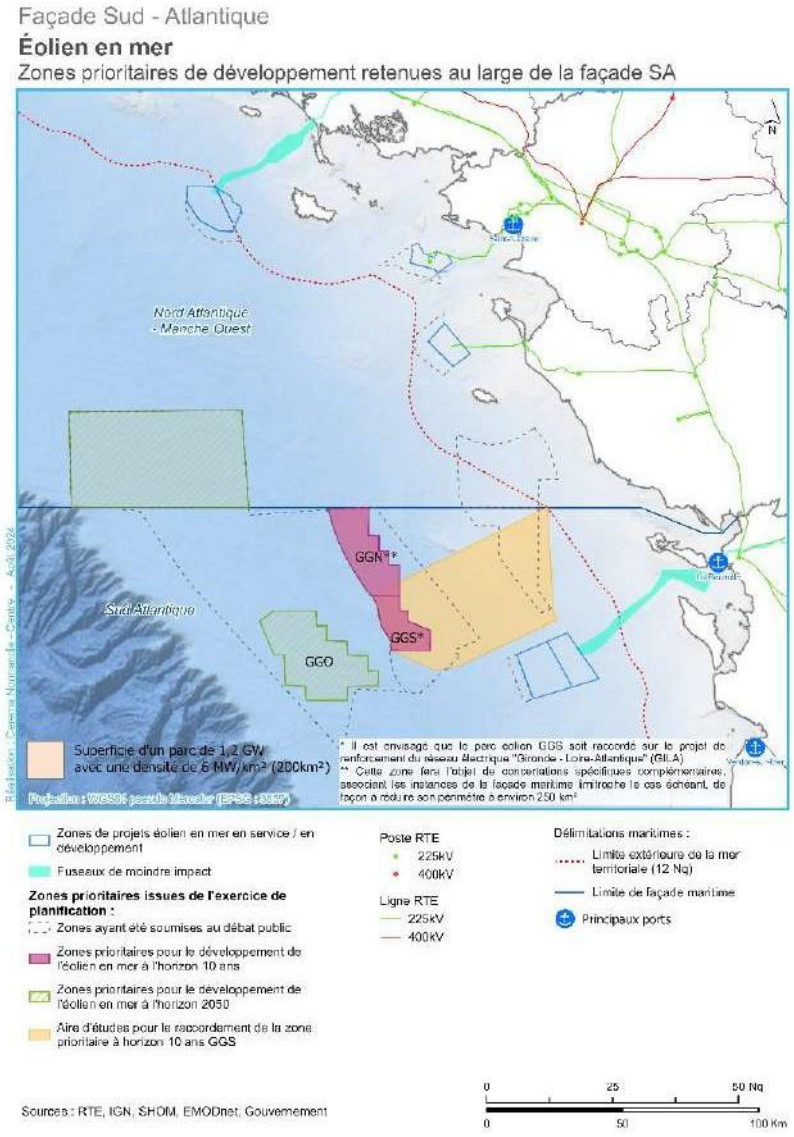
- **A map of priority areas in which offshore wind farm projects can be awarded within 10 years** of its adoption;

- **A map of priority areas by 2050**, which will be refined and revised after further public participation, scheduled to take place within the next ten years**.**

Alternative scenarios to the development of these additional offshore wind power capacities to be installed by 2050 (to meet our needs for decarbonized electricity and reach our climate objectives of lowering greenhouse gas emissions) reduce or even eliminate the effects of these installations on the marine environment, but make the decarbonization of the French energy mix highly uncertain. The environmental report studies alternative options (no development of other means of production, or development of other renewable or nuclear means of production).

For the South Atlantic arean, three sectors have been selected (see map below):

- **Bay of Biscay South (GGS) - 10-year priority area** for the 10th offshore wind tender (AO10). Identified as part of Zone B in the public debate, this area can accommodate 1.2 GW of floating wind turbines.
- **Bay of Biscay North (GGN) - A 10-year priority area** for the development of a 1.2 GW floating project, to be covered by subsequent competitive bidding procedures. This area will be the subject of further specific consultations, involving the authorities of the adjacent coastline where appropriate, so as to reduce its perimeter to around 250 km². Identified as part of Zone B, which is subject to public debate, this zone can accommodate 1.2 GW of floating wind turbines.
- **Bay of Biscay West (GGO) - Priority area for offshore wind power development by 2050**, subject to further studies and local consultation with stakeholders. This zone has been identified as part of Zone A, which has been submitted to the public debate.



Highly protected areas

The target of having 3% of the waters of the maritime regioncovered by highly protected areas by 2027 has been included in the national strategy for sea and coastline and in the national biodiversity strategy. The MSP document now includes trajectory elements for the development of new highly protected areas, enabling the target to be reached,

and to contribute to national objective of 5% of the French mainland waters by 2030.

At the scale of the South Atlantic maritime region, three types of sectors have been identified to initiate the recognition of areas to be highly protected :

— Candidate areas ready for certification: 6 areas, 5 in the « Parc naturel marin de l'estuaire de la Gironde et de la mer des Pertuis » and 1 in the « Parc naturel marin du Bassin d'Arcachon »;
— Potential areas to be given priority for consultation (by 2025 and by 2027): these are located in "parcs naturels marins" and Natura 2000 sites, where consultation must continue and where fishing risk analysis has been, is being or will be carried out;
– Zones requiring the creation of a protected area and further consultations (beyond 2027): within the area, there are areas of major ecological importance outside the current network of marine protected areas. These areas constitute zones of interest, which will be designated after 2027, once a management body has been set up. An analysis is proposed to meet the challenges of coordination with other plans and programs for the maritime region, based on a functional criteria (the programs have partly common objectives) or structural criteria (compatibility/consideration provided for by law), or in terms of scale if it is national, regional or basin-wide in scope.

Initial state of environment

The MSP document implements the marine strategy framework and, as such, aims directly maintaining or achieving good ecological status in marine waters.
The "marine environment" section sets out an initial state of environment and targets achieving good ecological status.

However, the notion of environmental issues as defined in the SEA is broader than the notion of ecological issues defined by the MSFD and based on "descriptors" of the good ecological status of marine waters, to cover landscapes, GHG emissions, air quality and risks. This report takes up the structure of the issues established during the SEAs of the first MSP plan (strategic and operational sections), with a few changes to take into account (1) the requests for greater detail expressed by the Environmental Authority in its opinions on the previous SEAs, and (2) new elements contributing to the establishment of this inventory (in the descriptor sheets in particular). The result is a list of 19 issues to be taken into account, divided into three categories (see table below).

Issue category	Acron.	Environmental issues	Correspondence with DCSMM descriptors	Characteristic elements
Issues related to the components of the marine environment	HB	Benthic habitats	D1	Quality of major biogenic, rocky, sedimentary and wetland habitat types
	HP	Pelagic habitats	D1	Deep-sea habitats, food webs
	MT	Mammals and turtles	D1	Species distribution and abundance: home ranges of sedentary bottlenose dolphin groups, seal colonies, feeding areas, other cetaceans, sea turtles
	OM	Seabirds	D1	Species distribution and abundance: nesting, feeding areas, colonies, wintering sites for seabirds and coastal birds, areas of maximum density, functional areas, migratory birds
	PC	Fish and cephalopods	D1	Species distribution and abundance: functional halieutic zones (spawning grounds, nurseries), localized populations (benthic invertebrates, elasmobranchs), areas of concentration and abundance.

				amphihaline fish migration
	EC	Commercial species	D3	Stock status of commercially exploited fish, crustacean and mollusc species
Pressures on the marine environment	ENI	Non-native species	D2	Non-native species that are invasive or disrupt ecosystems
	Eut	Eutrophication	D5	Human-induced eutrophication
	Int	Integrity of funds	D6	Disturbance and physical loss of the seabed
	Hyd	Hydrographic changes	D7	Hydrographic conditions
	Cont	Contaminants	D8	Chemical contaminants in the environment
	Qs	Health issues	D9	Chemical or microbiological contaminants in seafood products intended for human consumption
	From	Waste	D10	Quantity of waste and micro-waste floating, on the shore, on the seabed, ingested
	Br	Noise	D11	Level of noise disturbance by impulsive or continuous man-made noise
Other environmental issues	Pay	Landscapes and seascapes	Not concerned	Elements of coastal landscapes (lighthouses, classifications) and underwater landscapes
	GHG	GHG emissions	Not concerned	GHG emissions
	Air	Air quality	Not concerned	Air pollutants
	Ris	Natural and human hazards	Not concerned	Climatic, natural and industrial risks
	Co	Knowledge	Not concerned	Production of knowledge on environments, species and socio-economic activities

For each of these issues, the report presents: (1) a summary of their main characteristics on the maritime region, (2) a summary of their current status, based on scientific productions integrated into the SFM, (3) a spatial analysis of the deviation from good status or the level of issue at the scale of the vocation zones.

The graph below summarizes the analysis carried out on the good environmental status deviation or the level of challenge.

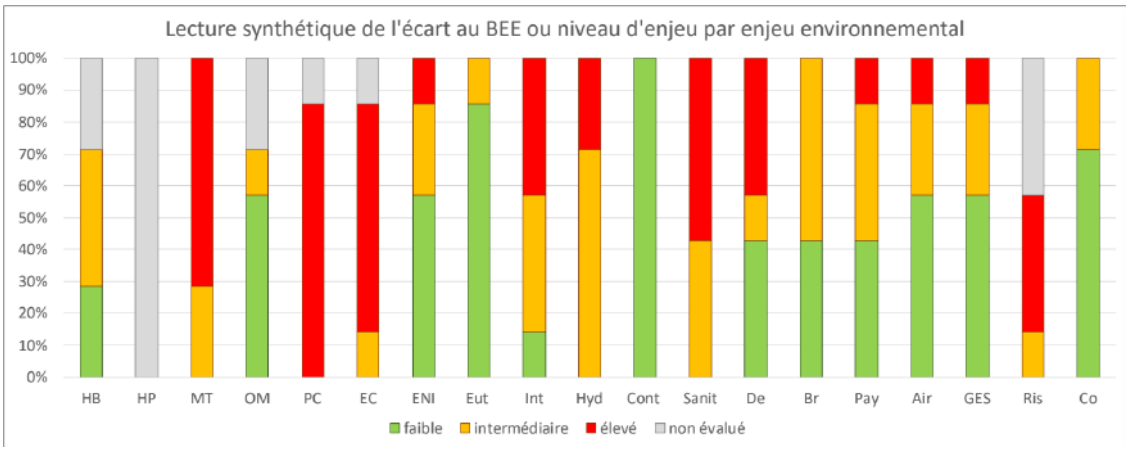


Figure 1 - Summary of deviation from good ecological status (GES) or challenge level by environmental challenge.

Percentages are relative to the number of vocation zones (i.e. 7). For example: for mammals and turtles, the deviation from the good environmental statue is high for around 70% of vocation zones.

Changing pressures and activities

The interactions between activities and the marine environment are manifold. Indeed, activities can generate pressures on the marine environment (environmental modifications, pollution, overexploitation, climate change, non-indigenous species, etc.) and lead to impacts on species and habitats.

Matrixes are proposed in the report to cross-reference pressures generated by sectors of activity with the marine environment and the potential impacts generated.

The report summarizes recent trends in activities and pressures over the last cycle.

A number of key findings stand out:

— The most important activities on the sea and coast have **varied recent development trends**, with some declining (materials extraction, maritime industries and public works), others increasing (coastal tourism, yachting and energy production) or stable (agriculture, aquaculture and professional fishing);

— Of the 16 activities studied, it was not possible to update the trends for two of them coastal development - monitoring tools are currently developed; and R&D). For the other activities, the trends remain the same for
10 activities and changing trends for the other 4. **Pressure** from shipping seems to **be easing**, while **pressure** from agriculture and commercial fishing is **declining** and **pressure from** shipbuilding **is increasing**;

— However, the reliability of these trend estimates is highly dependent on the availability of indicators for the entire maritime region.

Impact analysis

At the strategic stage, the impacts identified remain "potential" insofar as the actual impacts depend, in particular, on the measures taken as part of the maritime region's action plan to achieve socio-economic and environmental targets.

On the one hand, potential negative impacts are likely to be reduced by implementing the mitigation hierarchy as part of these measures. On the other hand, the environmental benefits expected from certain environmental targets will also depend on how they are implemented.

A) potential impact of environmental targets

It appears that changes in environmental targets are likely to generate 369 potential impacts on the 19 environmental issues.

By their very nature, environmental targets aim to improve the ecological status of the marine environment. However, while two-thirds (around 68%) of the impacts are considered positive, one-third (32%) are currently considered conservatively neutral.

This is due to the fact that some objectives are based on compliance with existing regulations or the absence of any increase in anthropogenic pressures compared with their current level, or include indicators that have yet to be defined. Reinforcing the drive to improve ecological status will require improved knowledge and coordination other planning (inland surface waters planning in particular).

B) potential impact of strategic socio-economic objectives

An update of the impacts of the current socio-economic targets was carried out, by (1) analyzing the consequences of any changes in the titles and indicators on their impacts; (2) analyzing the consistency of impacts with the activities/issues cross-referencing matrix;
(3) integrating the assessment of the impact of actions linked to the socio-economic targets analyzed during the SEA of the operational component of the first MSP plan (2021); (4) assessing the impact of the new socio-economic targets.

The specific socio-economic targets of the plan are likely to generate almost 356 potential impacts. The vast majority of socio-economic targets are likely to have a positive or neutral impact (over 70%), with the remainder likely to have a negative impact. However, the latter conclusion needs to be qualified, as actual impacts will depend on the precise conditions of implementation of the current socio-economic targets and the application of the mitigation hierarchy.

The issues most affected by these impacts are seabed integrity (24 impacts), greenhouse gaz emissions (24 impacts), benthic habitats (23 impacts), hydrographic changes (22 impacts), contaminants (22 impacts) and waste (22 impacts). Conversely, the issues least concerned are eutrophication (12 impacts), knowledge (14 impacts), landscapes and seascapes, noise, non-native species and mammals and turtles (16 impacts each).

C) potential impact of the vocation map

By organizing the various uses of the marine environment spatially, the vocation map itself has an impact on the environment. The distribution of marine protected areas and activities is designed to minimize negative environmental impacts and optimize positive measures. An analysis of cumulative pressure levels on the various environmental issues was carried out in each sector of the vocations map.

For each sector, activity levels (aquaculture, marine renewable energy, maritime transport, etc.) were cross-referenced with issue levels (environmental, pressure, other issues), in current and future situations, to identify a pressure level. There are limits to this exercise in terms of the availability and accuracy of information on activities, particularly in the future.

The report summarizes this analysis for all the sectors on the vocation map, with regard to the current and future situation. It shows :

— a high level of cumulative pressure from socio-economic activities in sector 1
In addition, the pressures exerted by the "Parc naturel marin de l'estuaire de la Gironde et de la mer des Pertuis" (Gironde estuary and Pertuis sea marine nature park) are also high. Prospects for the development of maritime activities are likely to increase the level of certain pressures, although it is not possible to specify to what extent (aquaculture, electricity production, tourism, maritime transport, industry, etc.);

— Cumulative pressure from socio-economic activities is generally moderate in the other coastal sectors (sectors 2, 3 and 4). In sector 2 "Aquitaine sandy coast", the level of pressure is currently moderate, but is set to increase in future, in line with the development of several activities (marine works, tourism). In these sectors, pressure is exerted on medium to high environmental stakes;

— a low to medium level of cumulative pressure from socio-economic activities in sector 5, "the continental shelf", which will increase in the future with the planned development of MREs and other activities (shipping, off-shore aquaculture). The level of environmental issues in this sector is mixed;

— Cumulative pressure from socio-economic activities is low in the two offshore sectors, and is unlikely to increase significantly in the future.

The level of environmental issues is also uneven in these sectors, and poorly known in sector 7 "Plaine abyssale".

D) Focus on offshore wind power

The development of offshore wind power makes a major contribution to mitigating climate change by producing low-carbon electricity. Combined with energy sobriety and efficiency, the decarbonized electrification to which wind power contributes will make it possible to eliminate the use of carbon-based fossil fuels (oil, gas), with a view to achieving carbon neutrality by 2050.

It should be noted that the availability of carbon-free electricity will enable the production of carbon-free fuels (ammonia, hydrogen, etc.) that can be used by the various ship fleets, or their electrification, thus reducing greenhouse gases and atmospheric pollutants from these fleets.

This contribution underpins the offshore wind power development objectives set out in the National Sea and Coastline Strategy 2024-2030. However, this development must be carried out under conditions that minimize local negative impacts on the marine environment.

An analysis of the expected environmental impact of offshore wind farms is proposed for each development phase (construction, operation, decommissioning) for the entire maritime region, and in particular for the most sensitive areas: benthic habitats, marine avifauna, marine mammals, fish and mega-invertebrates.

THE ANTICIPATED EFFECTS OF THE CONSTRUCTION PHASE WILL MAINLY AFFECT :

- Benthic populations and functional zones for fish populations, directly impacted by modifications to the seabed;
- Marine mammals are sensitive to the noise generated by construction work and the risk of collision with ships.

Priority is therefore given to locating developments outside benthic and reducing noise pollution.

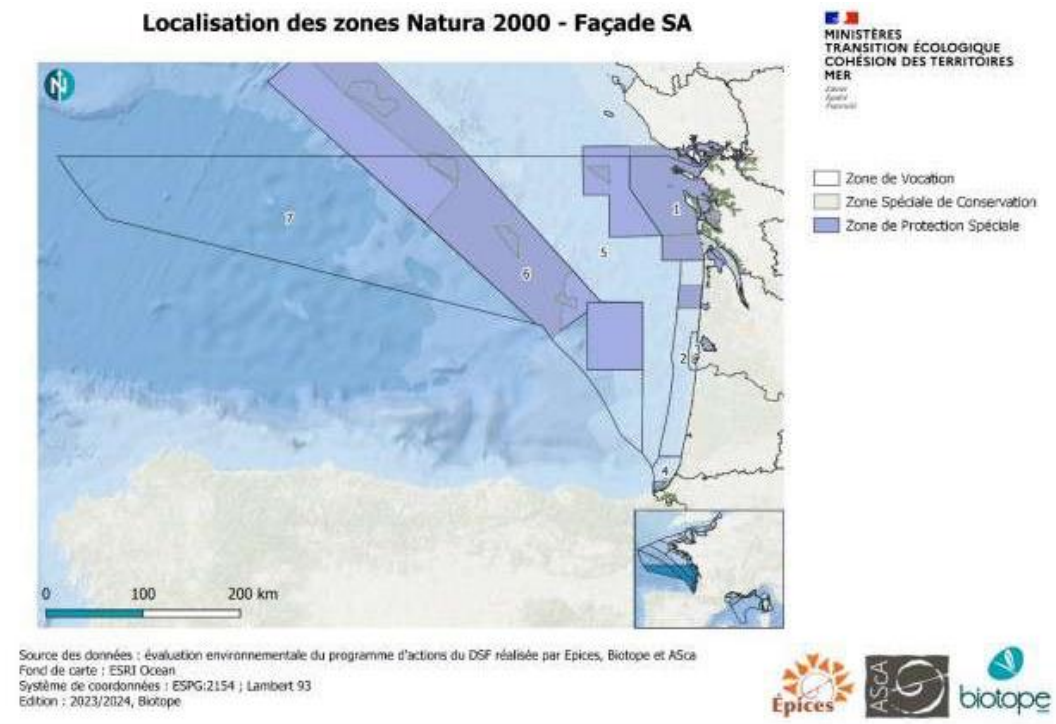
THE ANTICIPATED EFFECTS OF OPERATION MAINLY AFFECT :

- Birds, with the risk of collision, loss habitat and obstacles to movement.

Avoidance/reduction efforts are therefore particularly focused on locating parks outside functional zones for the most sensitive bird species.

E) potential impact on Natura 2000 areas

Of the 7 sectors delineated on the South Atlantic coast's vocational map, 6 include areas classified under Natura 2000 (20 Special Protection Areas and 28 Special Areas of Conservation - see map below). Only sector 7 does not.



Location of Natura 2000 sites within the 8 vocational zones of the SA coastline

On the South Atlantic coast, the overall analysis of impacts on habitats and species of community interest justifying the designation of a Natura 2000 area shows that :

- The strategic section sets targets for improving practices in all socio-economic activities. A clear majority of the targets have been assessed as likely to have a positive impact on the various groups of issues of community interest. While certain targets specifically aim at restoring certain environments, all actions designed to reduce pressure contribute to the passive restoration of environments, by reducing pressure.

- Very few targets have a negative impact. However, all stakeholder groups are concerned by them, and two socio-economic activities would appear to have only negative impacts (commercial ports, maritime transport and marine renewable energy). Projects likely to affect Natura 2000 sites will specify their impact and mitigation measures implemented on these sites in a Natura 2000 impact assessment. This assessment must ensure that the activity does not undermine the conservation objectives of the species and/or habitats that led to the designation of the affected site.

- The impact study of offshore wind farm projects on the coast, and any Natura 2000 impact assessment, will be able to assess the compatibility of each project with the conservation objectives of Natura 2000 sites, and any mitigation measures to be implemented. At the scale of the maritime region, these measures consist in avoiding as far as possible the areas most frequented by species of community interest.

- 18 objectives have uncertain impacts could prove to be essentially negative, and 16 environmental objectives have been assessed as neutral because they are insufficiently ambitious (concerning the management of fishing stocks, the limitation of certain impacts on habitats, the reduction of contaminant inputs and the reduction of the level of anthropogenic noise (impulsive emissions, maritime traffic)).

Negative impacts through habitat degradation and destruction and/or disturbance and destruction of community interest species concern professional fishing activities, aquaculture, commercial ports and maritime transport, the shipbuilding and nautical industries, renewable marine energies and the exploitation of marine and estuarine sediments. Among the activities with negative impacts, only aquaculture and renewable marine energies are subject to development through the designation of new potentially exploitable areas.

The MSP plan plays an important role in overseeing these new activities and those already in to limit their impact on the environment, notably via environmental targets. Several socio-economic targets also incorporate an environmental dimension and should limit the negative impact of these activities. As a result, the updated strategy should not significantly affect the seafront's habitats and species of community interest, given that these objectives take into account the various issues of community interest.

However :

- Particular attention must be paid to the correct application of targets positive impact during project development;

- Although the conservation status of amphihaline fish is generally good on the Natura 2000 sites considered (with the exception of sites FR5400430 "Vallée de la Charente" and FR7200811 "Panache de la Gironde et plateau rocheux de Cordouan" for European sturgeon and Atlantic salmon only), few targets concern the maintenance or improvement of this status, particularly in view of the maritime region's responsibility for the conservation of the last breeding site of the European sturgeon (Gironde estuary);

- Few of MSP plan impacts concern migratory bird species. Most of these negative impacts concern the development of marine renewable energy, and will therefore be taken into account in the impact studies to be carried out at project level.

Analysis of mitigation measures taken to avoid, reduce or offset impacts

Impact avoidance and reduction are often difficult to distinguish in practice. Avoidance is understood as a geographical avoidance, which avoids all impacts on a given target. If not all impacts on a target are avoided, the term reduction is used.

Avoidance needs to be prioritized at every stage, particularly from the marine planning stage onwards.

Avoidance is achieved in MSP document's strategic section by the spatial planning of different human activities in the vocation map. An example of this is the choice to locate wind power development in certain maritime zones, away from major environmental issues. Priority areas for wind power development are also located outside the study sectors for strong protection.

Another form of avoidance lies in the choice of technologies associated with the development of socio-economic activities.

Then, at the level of the projects linked to each activity, additional avoidance or reduction choices can be made according to the context and the impact assessment.

It should be pointed out that, by its very nature, the strategic section is intended to include mitigation measures to avoid and reduce the pressures exerted on the marine environment. Indeed, insofar as the MSP plan must enable the maintenance or achievement of good environmental status in the marine environment, this ambition must be reflected in the strategic section, notably environmental and socio-economic targets, as well as in spatial planning choices.

On the South Atlantic area, planning choices have been specified for the following topics: offshore wind power (appendix 6 of the revised SFM), high protection areas (appendix 5 of the revised SFM), and aquaculture (appendix 7 of the revised SFM). This stage enabled us to

- identify the areas of least environmental concern or sensitivity, while taking into account the technical and economic constraints on the development of activities, in order to reconcile the environment and socio-economic activities;

- for offshore wind power, to plan the implementation of projects, in particular installed capacity and the start of construction work, in order to reconcile the various uses underway, while taking into account economic, technical and logistical issues, as well as the avoidance of the most significant environmental challenges.

- for highly -protected areas, to identify the areas of greatest biological wealth to be given priority in the consultation process.

On the South Atlantic area, a thorough revision of the socio-economic targets has been carried out. Some of these new or revised targets present potentially positive impacts on certain issues that may be negatively impacted (or uncertainly impacted) by other targets. As such, the inclusion of these new targets in the revised plan can be seen as a step towards reducing the potentially negative or uncertain impact of other objectives.

The strategic section does not include any direct action to compensate for the impact of planning, but it does "anticipate and territorialize the compensation process, and prescribe conditions for subsequent projects [4]", to guide project developers towards degraded sites for investment.

Specific mitigation measures to limit the impact of offshore wind farm projects will be defined at the end of the impact assessment. The report presents the existing mitigation measures for these projects, as well as some of the requirements imposed on future projects through the specifications for the calls for tender. The precise mitigation measures required to limit the impact of offshore wind farm projects will be defined at the end of the impact assessment. The report presents the existing mitigation measures for these projects, as well as some of the requirements imposed on future projects through the tender specifications. Measures for monitoring the impact of projects and the effectiveness of mitigation measures will also be defined at the end of the impact assessment.

Indicators for monitoring potential impacts

An assessment of the environmental targets () was carried out, with regard to the targets set for the indicators associated with the targets in the previous version of the plan. It was found to be impossible to assess most of them. A project was launched to operationalize the indicators that could not be monitored and evaluated (43 indicators out of a total of 76) on a façade-wide scale.

— for a majority of them, to keep them as they are [5] as soon as they can be made operational (implementation of a protocol, designation service responsible of the monitoring, data banking, etc.);

— for a number, to retain them despite certain existing reservations about the possibility of making them operational (but with prospects deemed sufficient for

4 https://www.igedd.developpement-durable.gouv.fr/IMG/pdf/4__framing_dsf_blue_v5_delibere_v2_cle5a794c.pdf

5 With possible modifications to the wording.

to justify its continuation): funding not yet secured, data provision procedures to be specified, monitoring procedures to be defined with the creation of a tool... ;

— for a small number them, to remove them as non-operational.

This work will enable us to better assess whether the environmental targets are achieving their goals - and the associated positive impacts - in the next cycle. However, four environmental targets remain without indicators, which have yet to be defined for the next cycle.

In addition, a number of environmental targets and indicators have been created to reflect changes in public policy. These targets and indicators are all based on operational monitoring systems, thus ensuring broader coverage of all ecological issues and associated monitoring (e.g. marine litter).

The first strategic section identified 26 general strategic targets, broken down 67 specific socio-economic targets, with 104 indicators. At the time of the assessment, only around fifteen targets were operational and around thirty indicators could be evaluated, most of which could not be assessed (1) due to lack of data availability, (2) because some indicators were not relevant to the target set, or (3) due to lack of monitoring methodology. Several socio-economic targets were also included environmental objectives, generating duplication.

Based on this assessment, the government and the stakeholders of the Regional Maritime Council have selected the following criteria for updating the socio-economic targets and associated indicators:

- Ensure that the National sea and coastline strategy 2024-2030 is implemented on a territorial basis in the socio-economic targets, in particular by properly integrating climate change adaptation, sobriety and decarbonization issues;
- Integrate offshore wind development planning;
- Ensure that all uses, including primary production, coexist;
- Improve the readability and usability of indicators ;
- Ensuring consistency environmental and socio-economic targets indicators

Following this update, a number of changes have been made to the indicators associated with the socio-economic targets, notably to enhance their precision (their ability to reflect the stated target) and their operational nature (their capacity to be filled in).

This reinforcement is very clear for certain activities (ports and maritime transport, marine renewable energy), and more limited for others (tourism). The definition of new indicators, associated with the creation of new socio-economic targets, clearly reinforces our ability to monitor the evolution of certain sustainable development practices: decarbonization of ports, maintenance practices in the naval and nautical industry, raising awareness among yachtsmen of practices that limit greenhouse gas emissions, and the inclusion of coastline erosion issues in local planning documents.

Work on specifying the indicators (actor in charge of appraisal, data sources, frequency, etc.) has largely begun and will be detailed in MSP document monitoring system.